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Permit No. ST 6122

Issuance Date: November 18, 2005  
Effective Date: December 1, 2005  
Expiration Date: June 30, 2010

STATE WASTE DISCHARGE PERMIT NUMBER NO. ST 6122

STATE OF WASHINGTON  
DEPARTMENT OF ECOLOGY  
Southwest Regional Office

In compliance with the provisions of the  
State of Washington Water Pollution Control Law  
Chapter 90.48 Revised Code of Washington, as amended,  
authorizes

**National Frozen Food Corporation**  
**188 Sturdevant Road**  
**Chehalis, WA 98532**

to discharge wastewater in accordance with the special and general conditions which follow.

Facility Location:

Processing Facility  
436 NW State Street  
Chehalis, Washington

Discharge Location:

Legal Description : Section, Range, Township

Industry Type Vegetable Processor

Field Number, Section, Township, Range

Field No. 1, SE, NW, Sec.18, T.14 N, R.2W  
Field No. 2, NW, SE Sec.18, T.14 N, R.2W  
Field No. 4, NE, NE, Sec.19, T.14 N, R.2W  
Field No. 5, SW,SE sec.18, T.14 N, R.2W  
Field No. 6, SW, NW, Sec.17, T.14 N, R.2W

SIC Code: 2037

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### SUMMARY OF PERMIT REPORT SUBMITTALS

Refer to the Special and General Conditions of this permit for additional submittal requirements.

Permit Section	Submittal	Frequency	First Submittal Date
S2.A.	Discharge Monitoring Report	Monthly Quarterly Annually Semi-Annual	January 15, 2006 January 15, 2006 January 15, 2007 July 15 and January 15,
S4.A.	Operations and Maintenance Manual	1/permit cycle	March 1, 2006
S5.C.	Solid Waste Control Plan	As needed	
S5.C.	Solid Waste Control Plan Update	1/permit cycle	January 2, 2009
S6.	Work Plan for Additional Hydrogeologic Characterization	1/permit cycle	March 1, 2006
S7.A.	Summary Hydrogeological Report	1/permit cycle	January 2, 2008
S7.B.	Annual Hydrogeological Report	1/year	July 15, each year starting in 2006
S8.A.	Summary Irrigation and Crop Management Plan	1/permit cycle	January 2, 2008
S8.B.	Annual Irrigation and Crop Management Plan	1/year	April 15, each year starting in 2006
G7.	Application for permit renewal	1/permit cycle	January 2, 2010

## SPECIAL CONDITIONS

### S1. MONITORING SCHEDULE AND DISCHARGE LIMITATIONS

All discharges and activities authorized by this permit shall be consistent with the terms and conditions of this permit. The discharge of any of the following pollutants more frequently than, or at a concentration in excess of, that authorized by this permit shall constitute a violation of the terms and conditions of this permit.

Beginning on the effective date and lasting through the expiration date of this permit, the Permittee is authorized to apply wastewater to land via spray irrigation at the rates recommended below on the following designated irrigation lands:

Field Number, Section, Township, Range

Field No. 1, SE, NW, Sec.18, T.14 N, R.2W  
Field No. 2, NW, SE Sec.18, T.14 N, R.2W  
Field No. 4, NE, NE, Sec.19, T.14 N, R.2W  
Field No. 5, SW, SE, Sec.18, T.14 N, R.2W  
Field No. 6, SW, NW, Sec.17, T.14 N, R.2W

A. Wastewater Monitoring

The sampling point for the effluent will be at the effluent storage pond.

The Permittee shall monitor the wastewater according to the following schedule:

Parameter	Units	Sample Point	Sampling Frequency	Sample Type
Flow	MGD	Effluent Storage Pond	Monthly, when discharging	Meters
5-day Biochemical Oxygen Demand	mg/L	Effluent Storage Pond	Monthly, when discharging	Grab
Total Suspended Solids	mg/L	Effluent Storage Pond	Monthly, when discharging	Grab
pH	Standard Units	Effluent Storage Pond	Monthly, when discharging	Grab
Total Kjeldahl Nitrogen (as N)	mg/L	Effluent Storage Pond	Monthly, when discharging	Grab
Total Nitrate Nitrogen NO <sub>3</sub> (as N)	mg/L	Effluent Storage Pond	Monthly, when discharging	Grab

Total Dissolved Solids	mg/L	Effluent Storage Pond	Monthly, when discharging	Grab
Volatile Dissolved Solids	mg/L	Effluent Storage Pond	Monthly, when discharging	Grab
Chloride	mg/L	Effluent Storage Pond	Monthly, when discharging	Grab
Sodium	mg/L	Effluent Storage Pond	Monthly, when discharging	Grab
Ammonia NH <sub>3</sub> (as N)	mg/L	Effluent Storage Pond	Monthly, when discharging	Grab
Total-Phosphorus (as P)	mg/L	Effluent Storage Pond	Monthly, when discharging	Grab

AGRONOMIC LIMITATIONS	
PARAMETER	MAXIMUM
Total Dissolved Solids	As approved from Annual Irrigation and Crop Management Plan
Nitrogen	200 lbs/acre or as approved from Annual Irrigation and Crop Management Plan
5-day Bio Oxygen Demand (BOD <sub>5</sub> )	100 lbs/acre/day or as approved from the Annual Irrigation and Crop Management Plan

B. Ground Water Monitoring

The sampling points for ground water will be monitoring wells as listed in the following table plus the additional wells required in the schedule of compliance:

Monitoring Wells Location:

Well Number	North Latitude	West Longitude
MW-1A	46° 41' 22"	122° 57' 53"
MW-1B	46° 41' 27"	122° 58' 00"
MW-2A	46° 41' 16"	122° 58' 31"
MW-2C	46° 41' 46"	122° 58' 39"
MW-2D	46° 41' 28"	122° 58' 38"
MW-2E	46° 41' 19"	122° 58' 15"
MW-2F	46° 41' 34"	122° 58' 31"
MW-3A	To be determined	To be determined
MW-3B	To be determined	To be determined
OW-1*	To be determined	To be determined

\*Water Level Only.

The Permittee shall monitor the ground water according to the following schedule and limits at wells MW-2A, MW-2C, MW-2D, MW-2E, MW-2F, MW-3A and MW-3B.

The Permittee should notify the Department when sampling cannot be conducted due to high water conditions.

<b>Groundwater Monitoring Parameters and Permit Limits</b>				
<b>Parameter</b>	<b>Units</b>	<b>Daily Maximum</b>	<b>Sampling Frequency</b>	<b>Sample Type</b>
Ferrous Iron	+/- or mg/L	Report	Quarterly <sup>1</sup>	Field Test
pH	Standard Units	Report	Quarterly <sup>1</sup>	Field Test
Temperature	°C	Report	Quarterly <sup>1</sup>	Field Test
Conductivity	Micromhos/cm	Report	Quarterly <sup>1</sup>	Field Test
Dissolved Oxygen	mg/L	Report	Quarterly <sup>1</sup>	Field Test
Total Coliform Bacteria	CFU/100mL	Report	Quarterly <sup>1</sup>	Grab
Total Dissolved Solids	mg/L	500	Quarterly <sup>1</sup>	Grab
Total Kjeldahl Nitrogen	mg/L	Report	Quarterly <sup>1</sup>	Grab
Nitrogen, NH <sub>3</sub> -N	mg/L	Background	Quarterly <sup>1</sup>	Grab
NO <sub>3</sub> +NO <sub>2</sub> -N	mg/L	10	Quarterly <sup>1</sup>	Grab
Total Nitrogen <sup>2</sup>	mg/L	Background	Quarterly <sup>1</sup>	Grab
Orthophosphate	mg/L	Report	Quarterly <sup>1</sup>	Grab
Chloride	mg/L	250	Quarterly <sup>1</sup>	Grab
Dissolved Organic Carbon	mg/L	Report	Quarterly <sup>1</sup>	Grab
5-Day Biochemical Oxygen Demand	mg/L	Background	Quarterly <sup>1</sup>	Grab
Iron (Total)	mg/L	Report	Quarterly <sup>1</sup>	Grab
Manganese (Total)	mg/L	Report	Quarterly <sup>1</sup>	Grab
Calcium	mg/L	Report	Annual <sup>3</sup>	Grab
Magnesium	mg/L	Report	Annual <sup>3</sup>	Grab
Sodium	mg/L	Report	Annual <sup>3</sup>	Grab

Potassium	mg/L	Report	Annual <sup>3</sup>	Grab
Carbonate	mg/L	Report	Annual <sup>3</sup>	Grab
Bicarbonate	mg/L	Report	Annual <sup>3</sup>	Grab
Sulfate	mg/L	Report	Annual <sup>3</sup>	Grab
<sup>1</sup> Samples obtained in March, Report on March dmr, samples obtained in June, report on June dmr, samples obtained in September, report on September dmr, samples obtained in December, report on December dmr. Quarterly is defined as January-March, April-June, July-September and October-December.				
<sup>2</sup> Total Nitrogen=TKN+NO3-N+NO2-N.				
<sup>3</sup> . Annual sample to be obtained in September and reported on September dmr.				

The Permittee shall monitor groundwater according to the following schedule and limits at wells MW-1A and MW-1B:

Parameter	Units	Daily Maximum	Sample Frequency	Sample Type
pH	Standard Units	Report	Annual <sup>1</sup>	Field Test
Temperature	°C	Report	Annual <sup>1</sup>	Field Test
Conductivity	micromhos/cm	Report	Annual <sup>1</sup>	Field Test
Dissolved Oxygen	mg/L	Report	Annual <sup>1</sup>	Field Test
Ferrous Iron	+/- or mg/L	Report	Annual <sup>1</sup>	Field Test
Total Dissolved Solids	mg/L	Report	Annual <sup>1</sup>	Grab
Chloride	mg/L	Report	Annual <sup>1</sup>	Grab
NH3-N	mg/L	Report	Annual <sup>1</sup>	Grab
<sup>1</sup> Annual sample obtained in September and reported in September.				

The Permittee shall measure water levels according to the following schedule at wells MW-1A, MW-1B, MW-2A, MW-2C, MW-2D, MW-2E, MW-2F, MW-3A, and MW-3B:

Parameter	Units	Limit	Sample Frequency	Sample Type
Water Level	Feet	Report	Quarterly	Measurement

Water Level = Depth to water from the top of casing.

### C. Soil Monitoring

#### 1. Semi-Annual Monitoring

The Permittee shall perform soil monitoring on the irrigation lands twice per year, or within 10 days of April 1 prior to wastewater application and October 1 after the final wastewater application of the season. These sampling sites shall be located so as to be representative of each irrigation site or as represented in the crop management plan. If possible, sampling sites shall remain in the same vicinity from year to year. Testing at each sampling site shall be done on one foot soil increments. Results shall be submitted annually with the annual Irrigation and Crop Management Plan.



Composite samples will be for depths as shown (or until auger refusal)] and will be from a minimum of four (4) cores.

The Permittee shall monitor the soils in the sprayfields according to the following list:

Parameter	Units	Report Only	Sampling Frequency	Sample Point	Sample Type	Depth Increments <sup>1</sup>
Exchangeable sodium percentage	Percent	Report	Twice/year <sub>2</sub>	Each field	Composite	1
Cation exchange capacity	meq/100g	Report	Twice/year <sub>2</sub>	Each field	Composite	1
Organic matter	Percent	Report	Twice/year <sub>2</sub>	Each field	Composite	1
Moisture content	Percent	Report	Twice/year <sub>2</sub>	Each field	Composite	1
Total Kjeldahl Nitrogen (as N)	mg/Kg	Report	Twice/year <sub>2</sub>	Each field	Composite	1
Total Nitrate Nitrogen NO <sub>3</sub> (as N)	mg/Kg	Report	Twice/year <sub>2</sub>	Each field	Composite	1 and 4
NH <sub>3</sub> (as N)	mg/Kg	Report	Twice/year <sub>2</sub>	Each field	Composite	1 and 4
Total-Phosphorous (as P)	mg/Kg	Report	Twice/year <sub>2</sub>	Each field	Composite	1
Conductivity	mmhos/cm	Report	Twice/year <sub>2</sub>	Each field	Composite	1 and 4
Sodium	meq/100g	Report	Twice/year <sub>2</sub>	Each field	Composite	1
Calcium	meq/100g	Report	Twice/year <sub>2</sub>	Each field	Composite	1
Magnesium	meq/100g	Report	Twice/year <sub>2</sub>	Each field	Composite	1
Potassium	mg/Kg	Report	Twice/year <sub>2</sub>	Each field	Composite	1
Sulfate (as S)	mg/Kg	Report	Twice/year <sub>2</sub>	Each field	Composite	1
pH	S.U.	Report	Twice/year <sub>2</sub>	Each field	Composite	1

<sup>1</sup> Depth (inches) vs. Depth increment (ft.) for composite samples:

<sup>2</sup> Twice a year is defined as June and December.

0-12"	1
12-24"	2
24-36"	3
36-48"	4

48-60"	5
60-72"	6

D. Crop Monitoring

The Permittee shall perform crop monitoring on each field once per harvest at harvest time. Composite samples will be comprised of at least ten (10) random samples collected from each field. Results shall be submitted with the annual irrigation and crop management plan.

Parameter	Units	Sampling Point	Report Only	Sampling Frequency	Sample Type
Crop production	dry tons/ac	Each Field	Report	Once per harvest	Composite
Moisture content	Percent	Each Field	Report	Once per harvest	Composite
Total Kjeldahl Nitrogen	Percent	Each Field	Report	Once per harvest	Composite
Total Nitrate Nitrogen NO <sub>3</sub> (as N)	mg/Kg (dry wt)	Each Field	Report	Once per harvest	Composite
Total Phosphorus (as P)	Percent	Each Field	Report	Once per harvest	Composite
Sodium	mg/Kg (dry wt)	Each Field	Report	Once per harvest	Composite
Magnesium	mg/Kg (dry wt)	Each Field	Report	Once per harvest	Composite
Potassium	mg/Kg (dry wt)	Each Field	Report	Once per harvest	Composite
Calcium	mg/Kg (dry wt)	Each Field	Report	Once per harvest	Composite

E. Surface Water Monitoring

Surface Water Sampling Locations:

Monitoring Point	Description
SW-1	Point in river upstream of Field 4/5
SW-2	Point in river nearest to MW-2F
SW-3	Point in river nearest to MW-3B

The Permittee may propose substitute sites for these surface water sample locations at a more convenient site at any location downstream of the Chehalis Sewage Treatment Plant and upstream at the facility for the upstream sampling site, and downstream of Field 2 for the downstream sampling site plus one site in between these two.

Surface water shall be monitored in the Chehalis River according to the following schedule.

Surface Water Monitoring at SW-1, SW-2, and SW-3				
Parameter	Units	Report Only	Sampling Frequency	Sample Type
Water Level	Feet above MSL	Report	Quarterly <sup>a</sup>	Measurement
<sup>a</sup> Quarterly sampling is defined as January-March, April-June, July-September, October-December. Sampling shall be in the months of March, June, September and December and reported on the March, June, September and December dmrs.				

F. Sampling and Analytical Procedures

Samples and measurements taken to meet the requirements of this permit shall be representative of the volume and nature of the monitored parameters, including representative sampling of any unusual discharge or discharge condition, including bypasses, upsets and maintenance-related conditions affecting effluent quality.

Ground water sampling shall conform to the latest protocols in the *Implementation Guidance for the Ground Water Quality Standards*, (Ecology 1996).

Sampling and analytical methods used to meet the water and wastewater monitoring requirements specified in this permit shall conform to the latest revision of the *Guidelines Establishing Test Procedures for the Analysis of Pollutants* contained in 40 CFR Part 136 or to the latest revision of *Standard Methods for the Examination of Water and Wastewater* (APHA), unless otherwise specified in this permit or approved in writing by the Department of Ecology (Department).

All soil analysis and reporting will be in accordance with *Laboratory Procedures*, Soil Testing Laboratory, Washington State University, November 1981.

G. Flow Measurement

Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the quantity of monitored flows. The devices shall be installed, calibrated, and maintained to ensure that the accuracy of the measurements is consistent with the accepted industry standard for that type of device. Frequency of calibration shall be in conformance with manufacturer's recommendations and at a minimum frequency of at least one calibration per year. Calibration records shall be maintained for at least three years.

H. Laboratory Accreditation

All monitoring data required by the Department shall be prepared by a laboratory registered or accredited under the provisions of, *Accreditation of Environmental Laboratories*, Chapter 173-50 WAC. Flow, temperature, settleable solids, conductivity, pH, and internal process control parameters are exempt from this requirement. Testing for hazardous waste has not been included in the accreditation program. Testing for hazardous waste data shall be provided by a lab accredited for similar parameters in water media. Crops and soil data shall be tested by an agricultural laboratory that is an active participant in a nationally recognized agricultural laboratory proficiency testing program.

**S2. REPORTING AND RECORDKEEPING REQUIREMENTS**

The Permittee shall monitor and report in accordance with the following conditions. The falsification of information submitted to the Department shall constitute a violation of the terms and conditions of this permit.

A. Reporting

The first monitoring period begins on the effective date of the permit. Monitoring results shall be submitted monthly. Monitoring data obtained during the previous monitoring period shall be summarized and reported on a form provided, or otherwise approved, by the Department, and be postmarked or received no later than the 15th day of the month following the completed reporting period, unless otherwise specified in this permit. The report(s) shall be sent to:

Industrial Permit Coordinator  
Department of Ecology  
Southwest Regional Office  
P.O. Box 47775  
Olympia, WA 98504-7775

Discharge Monitoring Report forms must be submitted monthly whether or not the facility was discharging. If there was no discharge from the effluent storage pond during a given monitoring period, submit the form as required with the words "no discharge" entered in place of the wastewater monitoring results.

B. Records Retention

The Permittee shall retain records of all monitoring information for a minimum of three years. Such information shall include all calibration and maintenance records and all original recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit. This period of retention shall be extended during the course of any unresolved litigation regarding the discharge of pollutants by the Permittee or when requested by the Director.

C. Recording of Results

For each measurement or sample taken, the Permittee shall record the following information: (1) the date, exact place and time of sampling; (2) the individual who

performed the sampling or measurement; (3) the dates the analyses were performed; (4) who performed the analyses; (5) the analytical techniques or methods used; and (6) the results of all analyses.

D. Additional Monitoring by the Permittee

If the Permittee monitors any pollutant more frequently than required by this permit using test procedures specified by Condition S1. of this permit, then the results of this monitoring shall be included in calculation and reporting of the data submitted in the Permittee's self-monitoring reports.

E. Noncompliance Notification

In the event the Permittee is unable to comply with any of the permit terms and conditions due to any cause, the Permittee shall:

1. Immediately take action to stop, contain, and cleanup unauthorized discharges or otherwise stop the violation, and correct the problem;
2. Repeat sampling and analysis of any violation and submit the results to the Department within 30 days after becoming aware of the violation;
3. Immediately notify the Department of the failure to comply; and
4. Submit a detailed written report to the Department within thirty days, unless requested earlier by the Department, describing the nature of the violation, corrective action taken and/or planned, steps to be taken to prevent a recurrence, results of the resampling, and any other pertinent information.

Compliance with these requirements does not relieve the Permittee from responsibility to maintain continuous compliance with the terms and conditions of this permit or the resulting liability for failure to comply.

F. Maintaining a Copy of This Permit

A copy of this permit shall be kept at the facility and be made available upon request to the Department inspectors.

**S3. FACILITY LOADING**

Design Criteria

The Summary Irrigation and Crop Management Plan will determine those flows or waste loadings of flow, Nitrate and TDS that shall not be exceeded.

**S4. OPERATION AND MAINTENANCE**

The Permittee shall at all times be responsible for the proper operation and maintenance of any facilities or systems of control installed to achieve compliance with the terms and conditions of the permit.

A. Operations and Maintenance Manual

An Operations and Maintenance (O&M) Manual shall be prepared by the Permittee in accordance with WAC 173-240-150 and be submitted to the Department for approval no later than **March 1, 2006**. All manual changes or updates shall be submitted to the Department whenever they are incorporated into the manual. The approved operation and maintenance manual shall be kept available at the permitted facility.

The operation and maintenance manual shall contain the treatment plant process control monitoring schedule. All operators shall follow the instructions and procedures of this manual.

The manual shall include:

1. Emergency procedures for plant shutdown and cleanup in event of wastewater system upset or failure;
2. Irrigation system operational controls and procedures;
3. Protocols and procedures for ground water monitoring network sampling and testing.

B. Bypass Procedures

The Permittee shall immediately notify the Department of any spill, overflow, or bypass from any portion of the treatment system.

The bypass of wastes from any portion of the treatment system is prohibited unless one of the following conditions (1, 2, or 3) applies:

1. *Unavoidable Bypass* -- Bypass is unavoidable to prevent loss of life, personal injury, or severe property damage. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass.

If the resulting bypass from any portion of the treatment system results in noncompliance with this permit the Permittee shall notify the Department in accordance with condition S3.E "Noncompliance Notification."

2. *Anticipated Bypass That Has The Potential to Violate Permit Limits or Conditions* -- Bypass is authorized by an administrative order issued by the Department. The Permittee shall notify the Department at least 30 days before the planned date of bypass. The notice shall contain a description of the bypass and its cause; the duration of the bypass, including exact dates and times; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the bypass. The Department will consider the following prior to issuing an administrative order:
  - a. If the bypass is necessary to perform construction or maintenance-related activities essential to meet the requirements of the permit.

- b. If there are feasible alternatives to bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, stopping production, maintenance during normal periods of equipment down time, or transport of untreated wastes to another treatment facility.
- c. If the bypass is planned and scheduled to minimize adverse effects on the public and the environment.

After consideration of the above and the adverse effects of the proposed bypass and any other relevant factors, the Department will approve or deny the request. The public shall be notified and given an opportunity to comment on bypass incidents of significant duration, to the extent feasible. Approval of a request to bypass will be by administrative order issued by the Department under RCW 90.48.120.

- 3. *Bypass For Essential Maintenance Without the Potential to Cause Violation of Permit Limits or Conditions* -- Bypass is authorized if it is for essential maintenance and does not have the potential to cause violations of limitations or other conditions of the permit, or adversely impact public health as determined by the Department prior to the bypass.

C. Irrigation Land Application

- 1. There shall be no runoff of wastewater applied to land by spray irrigation to any surface waters of the state or to any land not owned by or under control of the Permittee.
- 2. The Permittee shall use recognized good practices, and all available and reasonable procedures to control odors from the land application system. When notified by the Department, the Permittee shall implement measures to reduce odors to a reasonable minimum.
- 3. The wastewater shall not be applied to the irrigation lands in quantities that:
  - a. Significantly reduce or destroy the long-term infiltration rate of the soil.
  - b. Would cause long-term anaerobic conditions in the soil.
  - c. Would cause ponding of wastewater and produce objectionable odors or support insects or vectors.
  - d. Would cause leaching losses of constituents of concern beyond the treatment zone or in excess of the approved design. Constituents of concern are constituents in the wastewater, partial decomposition products, or soil constituents that would alter ground water quality in amounts that would affect current and future beneficial uses.
- 4. The Permittee shall maintain all irrigation agreements for lands not owned for the duration of the permit cycle. Any reduction in irrigation lands by termination of any irrigation agreements may result in permit modification or revocation. The Permittee shall immediately inform the Department in writing of any proposed changes to existing agreements.



## **S5. SOLID WASTE DISPOSAL**

### **A. Solid Waste Handling**

The Permittee shall handle and dispose of all solid waste material in such a manner as to prevent its entry into state ground or surface water.

### **B. Leachate**

The Permittee shall not allow leachate from its solid waste material to enter state waters without providing all known, available and reasonable methods of treatment, nor allow such leachate to cause violations of the State Surface Water Quality Standards, Chapter 173-201A WAC, or the State Ground Water Quality Standards, Chapter 173-200 WAC. The Permittee shall apply for a permit or permit modification as may be required for such discharges to state ground or surface waters.

### **C. Solid Waste Control Plan**

The solid waste information furnished with the permit application will satisfy the necessity for a solid waste control plan. Should this arrangement cease to operate, a solid waste control plan shall be submitted by the Permittee as follows:

A solid waste plan shall include all solid wastes with the exception of those solid wastes regulated by Chapter 173-303 WAC (Dangerous Waste Regulations). The plan shall include at a minimum a description, source, generation rate, and disposal methods of these solid wastes. This plan shall not be at variance with any approved local solid waste management plan. Any proposed revision or modification of the solid waste handling plan must be submitted to the Department. The Permittee shall comply with the plan and any modifications thereof. The Permittee shall submit an update of the solid waste control plan with the application for permit renewal no later than **January 2, 2009**.

## **S6. ADDITIONAL HYDROGEOLOGIC CHARACTERIZATION**

The Permittee shall prepare and submit no later than **March 1, 2006**, to the Department a Work Plan to complete the hydrogeologic characterization at Field 4/5 and to establish a monitoring network at Field 2. The Work Plan shall include the following work elements:

- Install one observation well (for water levels only) in field 4/5 as shown in Figure 1. This well should be completed into the water table about 5-10 feet. The purpose of this well is to provide water levels that will be used to better define the groundwater flow pattern in the west portion of Field 4/5. If necessary this well could be completed at or below the ground surface so as not to interfere with wastewater application and farming activities. This well should be designated OW-1.
- Install two monitoring wells in Field 2 at the locations shown in Figure 1. The upgradient (east well) should be completed in the buffer zone of the land application area. Wells should be screened between 5 and 10 feet below the water table so that water quality samples can be obtained year round. These wells shall be designated MW-3A and MW-3B.

- Three staff gages should be installed in the Chehalis River at the approximate locations show in Figure 1. The staff gages will provide the water level elevations of the Chehalis River. The Permittee may propose alternative methods of determining water surface elevation subject to the Department's approval.
- Survey the relative wellhead elevations of the new monitoring wells and staff gages to the same datum as the existing monitoring network.
- Conduct insitu hydrologic testing (slug tests or short term pumping tests) at each monitoring well. These data should be evaluated to estimate the distribution of hydraulic conductivity in the shallow aquifer.

All drilling and well installation must meet the requirements the Minimum Standards for Construction and Maintenance of Wells Chapter 173-160 WAC. Prior to initiating field activities NFF should prepare a detailed work plan that describes the methods that will be used to complete this work. The plan shall be submitted to the Department for review within three months of the effective date of this permit. The monitoring well and staff gage installations, well surveys and hydrologic testing must be completed by **July 2006**.

## **S7. HYRDOGEOLOGICAL REPORTS**

### **A. Summary Hydrogeological Report**

A Summary Hydrogeological Report shall be prepared using data obtained from the annual Hydrogeological Reports submitted during the term of the previous permits and the monitoring data obtained and reported on the DMR reports during the term of the previous permit. This document will be submitted on or before **January 2, 2008**. The Summary Hydrogeological Report should describe the hydrogeological conditions at the application fields including direction and rates of groundwater flow and seasonal variation, a summary of water quality results, a comparison of upgradient and downgradient water quality results, and wastewater loading estimates for each field for contaminants of concern. The report should provide all data collected over the monitoring period including:

1. A figure showing the location of the fields, monitoring stations, the Chehalis River, and other relevant site features
2. As-built diagrams for all monitoring wells
3. Measuring point elevations for all monitoring stations
4. Water level data obtained from all monitoring stations including hydrographs for representative stations
5. Water-table contour maps that show seasonal variation of groundwater flow direction
6. Hydrologic test results for wells and soil samples
7. Water quality results for all stations.

The purpose of the summary report is to compile and display all ground water data collected at the facility with special emphasis on the data collected over the last five years (the permit interval). These data should be evaluated for trends to assist with the preparation of the new permit to be issued for the next permit cycle. The Department will retain this requirement in the permit. This report could be combined with the Summary Irrigation and Crop Management Plan.

B. Annual Hydrogeological Reports

An annual Hydrogeological Report shall be submitted on or before July 15 each year starting with 2006 for department review. The Annual Hydrogeologic Report should describe (for the monitoring period) all hydrogeologic studies and any new monitoring stations installed, the hydrogeologic conditions at the application fields including direction and rates of groundwater flow and seasonal variation, a summary of water quality results, and a comparison of upgradient and downgradient water quality. The annual hydrogeologic report should provide all data collected over the monitoring period including:

1. A figure showing the location of the fields, monitoring stations, the Chehalis River, and other relevant site features
2. As-built diagrams for all new monitoring wells
3. Measuring point elevations for all monitoring stations
4. Water level data obtained from all monitoring stations including hydrographs for representative stations
5. Water-table contour maps that show seasonal variation of groundwater flow direction
6. Hydrologic test results for wells and soil samples
7. Water quality results for all stations.

**S8. IRRIGATION AND CROP MANAGEMENT PLANS**

A. Summary Irrigation and Crop Management Plan

A Summary Irrigation and Crop Management Plan shall be prepared using data obtained from the Annual Irrigation and Crop Management Plans submitted during the term of the previous permit and the monitoring data obtained and reported on the DMR reports during the term of the previous permit. This document will be submitted on or before **January 2, 2008**. This study should propose the following:

1. Limits for the application of irrigation water to the fields including the calculations from which these limits were obtained. These limits shall be specific to month and field.
2. Limits for the application of nutrients to the various fields including the calculations from which these limits were obtained. These limits should be chosen to prevent any increase over background for nitrogen, flow, or total

dissolved solids in the downstream monitoring wells. These limits shall be specific to month and field.

3. Ecology will check this report for adequacy.

The purpose of the summary report is to compile and display all wastewater application and crop management data collected at the facility with special emphasis on the data collected over the last five years (the permit interval). This data should be evaluated for trends to assist with the preparation of the new permit to be issued for the next permit cycle. The Department will retain the requirement in the permit. This report could be combined with the Summary Hydrogeologic Report. Adequacy is determined by best professional judgment.

B. Annual Irrigation and Crop Management Plan

An Irrigation and Crop Management Plan shall be submitted annually by April 15 each year for Department's review. The plan shall generally conform with Guidelines for *Preparation of Engineering Reports for Industrial Wastewater Land Application Systems*, Ecology 1993. The plan must be prepared by a soil scientist. The plan shall include the following elements:

1. Annual Summary of Farm Operations for Previous Year

This summary shall include:

- a. For each crop grown, the total acreage and quantity harvested.
- b. Calculated balances for nutrients, salts, TDS, or other design limiting parameters. The calculations shall include crop consumptive use, process wastewater loadings of nutrients, salts, TDS or other design limiting parameters, and contributions from commercial fertilizers applied.
- c. Calculated water balance. The calculations shall include irrigation system efficiency and application uniformity, the quantity of supplemental irrigation water and process wastewater applied, crop consumptive use, water stored in the soil profile outside the normal growing season, and salt leaching requirements.
- d. Soil testing results. A summary of the soil testing results shall be submitted and discussed as part of the annual Irrigation and Crop Management Plan.

2. Cropping Schedule for Upcoming Year

This schedule shall include:

- a. Crop Management. The proposed acreage for each crop, cultivation and harvesting requirements, expected crop yields, and methods for establishing a crop, and proposed schedule for herbicide, pesticide, and fertilizer application.

- b. Irrigation Management. The frequency and timing of wastewater and supplemental irrigation water application (including harvest and non-harvest periods), and recommended rest cycles for wastewater application where organic or hydraulic loading is a concern.



Figure 1. National Frozen Foods Monitoring Network.

## **GENERAL CONDITIONS**

### **G1. SIGNATORY REQUIREMENTS**

All applications, reports, or information submitted to the Department shall be signed as follows:

- A. All permit applications shall be signed by either a principal executive officer or ranking elected official.
- B. All reports required by this permit and other information requested by the Department shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:
  - 1. The authorization is made in writing by the person described above and is submitted to the Department at the time of authorization, and
  - 2. The authorization specifies either a named individual or any individual occupying a named position.
- C. Changes to authorization. If an authorization under paragraph B.2. above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization must be submitted to the Department prior to or together with any reports, information, or applications to be signed by an authorized representative.
- D. Certification. Any person signing a document under this section shall make the following certification:

"I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

### **G2. RIGHT OF ENTRY**

Representatives of the Department shall have the right to enter at all reasonable times in or upon any property, public or for the purpose of inspecting and investigating conditions relating to the pollution or the possible pollution of any waters of the state. Reasonable times shall include normal business hours; hours during which production, treatment, or discharge occurs; or times when the Department suspects a violation requiring immediate inspection. Representatives of the Department shall be allowed to have access to, and copy at reasonable cost, any records required to be kept under terms and conditions of the permit; to inspect any monitoring equipment or method required in the permit; and to sample the discharge, waste treatment processes, or internal waste streams.

**G3. PERMIT ACTIONS**

This permit shall be subject to modification, suspension, or termination, in whole or in part by the Department for any of the following causes:

- A. Violation of any permit term or condition;
- B. Obtaining a permit by misrepresentation or failure to disclose all relevant facts;
- C. A material change in quantity or type of waste disposal;
- D. A material change in the condition of the waters of the state; or
- E. Nonpayment of fees assessed pursuant to RCW 90.48.465.

The Department may also modify this permit, including the schedule of compliance or other conditions, if it determines good and valid cause exists, including promulgation or revisions of regulations or new information.

**G4. REPORTING A CAUSE FOR MODIFICATION**

The Permittee shall submit a new application, or a supplement to the previous application, along with required engineering plans and reports, whenever a new or increased discharge or change in the nature of the discharge is anticipated which is not specifically authorized by this permit. This application shall be submitted at least 60 days prior to any proposed changes. Submission of this application does not relieve the Permittee of the duty to comply with the existing permit until it is modified or reissued.

**G5. PLAN REVIEW REQUIRED**

Prior to constructing or modifying any wastewater control facilities, an engineering report and detailed plans and specifications shall be submitted to the Department for approval in accordance with Chapter 173-240 WAC. Engineering reports, plans, and specifications should be submitted at least 180 days prior to the planned start of construction. Facilities shall be constructed and operated in accordance with the approved plans.

**G6. COMPLIANCE WITH OTHER LAWS AND STATUTES**

Nothing in the permit shall be construed as excusing the Permittee from compliance with any applicable federal, state, or local statutes, ordinances, or regulations.

**G7. DUTY TO REAPPLY**

The Permittee must apply for permit renewal by **January 2, 2010**.

**G8. PERMIT TRANSFER**

This permit is automatically transferred to a new owner or operator if:

- A. A written agreement between the old and new owner or operator containing a specific date for transfer of permit responsibility, coverage, and liability is submitted to the Department;
- B. A copy of the permit is provided to the new owner and;
- C. The Department does not notify the Permittee of the need to modify the permit.



Unless this permit is automatically transferred according to section A. above, this permit may be transferred only if it is modified to identify the new Permittee and to incorporate such other requirements as determined necessary by the Department.

**G9. PAYMENT OF FEES**

The Permittee shall submit payment of fees associated with this permit as assessed by the Department. The Department may revoke this permit if the permit fees established under Chapter 173-224 WAC are not paid.

**G10. PENALTIES FOR VIOLATING PERMIT CONDITIONS**

Any person who is found guilty of willfully violating the terms and conditions of this permit shall be deemed guilty of a crime, and upon conviction thereof shall be punished by a fine of up to ten thousand dollars and costs of prosecution, or by imprisonment in the discretion of the court. Each day upon which a willful violation occurs may be deemed a separate and additional violation.

Any person who violates the terms and conditions of a waste discharge permit shall incur, in addition to any other penalty as provided by law, a civil penalty in the amount of up to ten thousand dollars for every such violation. Each and every such violation shall be a separate and distinct offense, and in case of a continuing violation, every day's continuance shall be and be deemed to be a separate and distinct violation.